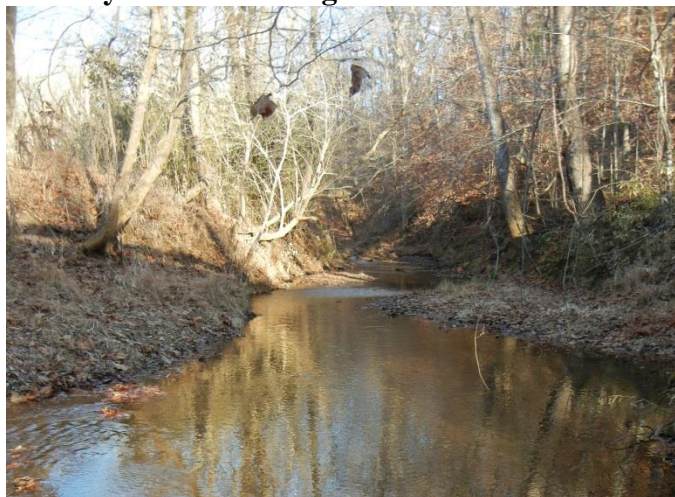




Kings Mountain National Military Park Water Quality Summary Fiscal Year 2013

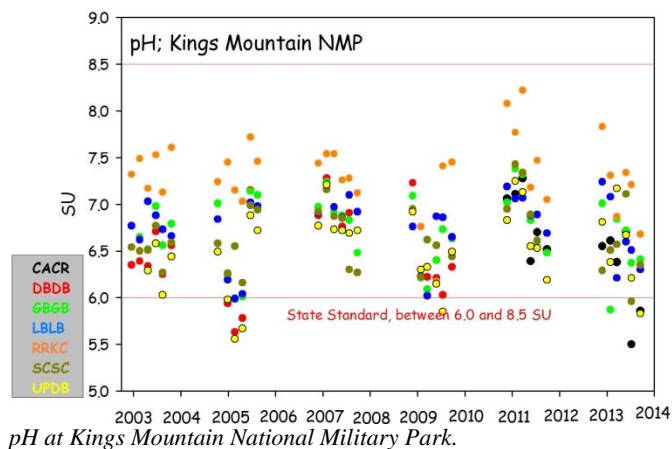
Water quality at Kings Mountain National Military Park remains good



Kings Creek, November 26, 2012. Image by Shepard McAninch.

Highlights of Fiscal Year 2013 Monitoring

The Cumberland Piedmont Inventory and Monitoring Network began long-term water quality monitoring at Kings Mountain National Military Park (KIMO) in fiscal year 2003 (October 2002 through September 2003) – sampling occurs bi-monthly in alternating years. Water quality for KIMO during fiscal year 2013 saw the recovery from a prolonged drought throughout the Blue Ridge and Piedmont. Cabin Creek and Upper Dellingham Branch each twice exceeded the USEPA recommended levels of *Escherichia coli*. Upper Dellingham Branch has on occasion exceeded this limit over the past twelve years. As both watersheds are within the park and devoid of development, wildlife is the likely source of bacterial contamination. Streams of KIMO, with exception of Kings Creek, have low acid neutralizing capacity and naturally low pH. Garner Branch, Stonehouse Creek and Upper Dellingham Branch each fell below 6.0 SU one time in FY2013, Cabin Creek, twice. This is a natural condition for these streams.

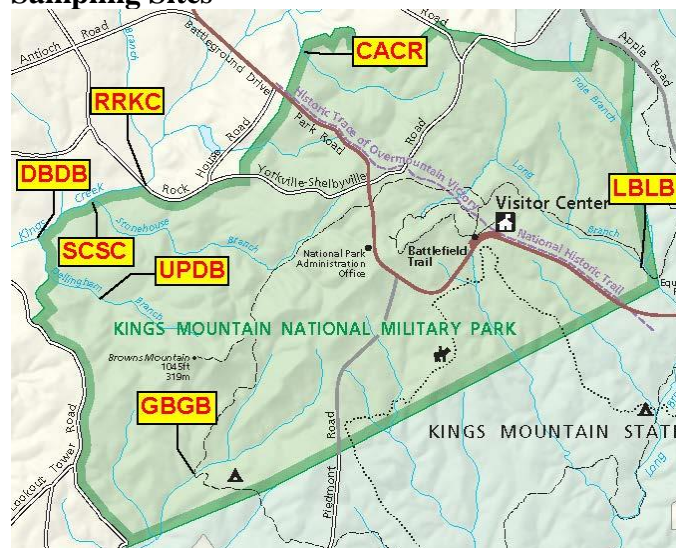


Water Quality Standards

All KIMO waters are considered “South Carolina Outstanding Resource Waters” which prohibit discharge and other pollution sources, while criteria are defined as “South Carolina Fresh Water” a combination of the highest standards under the Clean Water Act as promulgated by the state. South Carolina currently does not impose a standard for *Escherichia coli* bacteria so we have adapted the USEPA recommendations for “Single Sample Infrequently Used Full Contact Recreation.” We use the most tolerant of federal recommendations reflecting the lack of recreational use of KIMO waters, 576 MPN/100ml. Other monitored parameters, ANC and Specific Conductance (SpC), are without state standards or federal guidelines. These parameters are useful in interpreting water quality.

Water Temperature	Not to exceed 32.2°C
Dissolved Oxygen	Not to exceed 4.0 mg/l
pH	Between 6.0 and 8.5 SU
<i>Escherichia coli</i>	Not to exceed 576 MPN/100ml
SpC	No Standard
ANC	No Standard

Sampling Sites



CACR	Cabin Creek	GBGB	Gardner Branch
DBDB	Dellingham Branch	LBLB	Long Branch
UPDB	Upper Dellingham Branch	RRKC	Kings Creek
SCSC	Stonehouse Creek		

Future Monitoring

Water quality sampling is scheduled to resume in fiscal year 2015.

Water quality data are available upon request to the Cumberland Piedmont Network or our website:

<http://science.nature.nps.gov/im/units/cupn/reports.cfm>